REMARKS

In view of the foregoing amendments and the following representations, reconsideration and allowance of the above-identified application is respectfully requested.

All the claims as originally filed, claims 1-11, have been canceled without prejudice. Claims 12-27 are submitted for reconsideration and are in the present application. Claims 28-30 have been withdrawn from consideration and will be pursued in a divisional application filed concurrently herewith.

In the Office Action on page 3, fourth paragraph, the Examiner rejected claims 12-27 under the judicially created doctrine of obviousness-type double patenting in view of United States Patent No. 6,174,548. Although Applicants respectfully disagree with this rejection, in order to expedite prosecution of the present application, Applicants submit a Terminal Disclaimer of the present application with respect to any portion of the present application that would extend beyond the term of United States Patent No. 6,174,548. In view of the Terminal Disclaimer, it is respectfully submitted that the rejection of claims 12-27 under the judicially created doctrine of obviousness type double patenting in view of United States Patent No. 6,174,548 has been overcome and should be withdrawn.

In the Office Action on page 4, first paragraph, the Examiner rejected claims 12-27 under the judicially created doctrine of obviousness-type double patenting in view of United States Patent No. 6,096,340. Although Applicants respectfully disagree with this rejection, in order to expedite prosecution of the present application, Applicants submit a Terminal Disclaimer of the present application with respect to any portion of the present

application that would extend beyond the term of United States Patent No. 6,096,340. In view of the Terminal Disclaimer, it is respectfully submitted that the rejection of claims 12-27 under the judicially created doctrine of obviousness type double patenting in view of United States Patent No. 6,096,340 has been overcome and should be withdrawn.

In the Office Action on page 4, third paragraph, the Examiner rejected claims 12-27 under 35 U.S.C. § 103(a) as being unpatentable over Chong Kun Dang Korean Patent Application No. 92-17571 (hereinafter "the CKD application"). The Examiner contends that the CKD application teaches omeprazole pellets that are similar to the pellets recited in claims 12-27 because the ingredients are similar and the CKD application teaches the use of "small to sufficient" quantities of an amino acid which are safe to the body.

Applicants respectfully traverse this rejection. Claims 12-17 and 20-25 require the core of the recited formulation to contain 0.5 to 10% based upon the total weight of the core of arginine or lysine and claims 18, 19, 26 and 27 require the core to contain 1 to 3% based upon the total weight of the core of arginine or lysine. The CKD application requires much large amounts of amino acid in the core. Page 361 of the CKD application explains that the amount of amino acid should be 15 to 25 times more than the amount of omeprazole based on the molar amounts, while the examples uses approximately 100 time more amino acid by weight than the weight of omeprazole. Claims 12-27 require that the core contain about 10-50% of omeprazole while the amount of arginine or lysine is 0.5 to 10%. Thus, claims 12-27 use at most a 1:1 weight ratio of arginine to omeprazole and generally use less arginine or lysine than omeprazole. This 1:1 weight ratio is not a large excesses of amino acid to omeprazole as taught by the CKD application.

In addition, the examples of the CKD application employ cores that contain more than 70% of amino acid. Example 3 contains 80% arginine, Example 4 contains 70% arginine and Example 5 contains 71.7% arginine. These cores are then used in the subsequent examples. Clearly no individual of ordinary skill in the art would interpret the teachings of such large amounts of arginine as even remotely suggesting that a stable pellet formulation could be prepared with 10% arginine or less and using a 1:1 weight ratio or less of arginine to omeprazole. In view of the great differences between the amounts of arginine and omeprazole employed in the core of the CKD application and claims 12-27, it is respectfully submitted that the pending claims are patentable over the teachings of the CKD application.

In the Office Action on page 5, second paragraph, the Examiner rejected claims 12-27 under 35 U.S.C. § 103(a) as being unpatentable over Odidi et al, United States Patent No. 6,296,876 in view of Kim, KR 9208161B (abstract only).

Applicants respectfully traverse this rejection.

As indicated in the March 28, 2003 response, both the Odidi et al. reference and the Kim reference require the application of a water soluble sublayer to a stabilized omeprazole core **before** the application of an enteric coating layer. The invention recited in the present claims eliminates this costly and time consuming step of the separate application of a sublayer between the omeprazole core and enteric coating. Neither of these references alone or combined would suggest to an individual of ordinary skill in the art that a stable omeprazole pellet could be prepared by eliminating the application of the intermediate layer between the omeprazole core and the enteric coating.

On page 6 of the Office Action, the Examiner indicates that absent a showing of criticality, the removal of the sublayer does not impart patentability. In response to this comment, the Applicants respectfully submit that the large amount of prior art that is of record shows the critical nature of the sublayer. Almost ever reference of record that describes an omeprazole pellet employs a water soluble subcoating between the omeprazole core and the enteric coating. Further, Applicant's direct the Examiner's attention to United States Patent No. 4,786,505 which was one of the earlier disclosures of enteric coated omeprazole pellets. The specification of United States Patent 4,786,505 states:

> In order to obtain a pharmaceutical dosage form of omeprazole which prevents omeprazole from contact with acidic gastric juices, the cores must be enteric coated. Ordinary enteric coatings, however, are made of acidic compounds. If covered with such a conventional enteric coating, omeprazole rapidly decomposes by direct or indirect contact with it, with the result that the preparations become badly discolored and lose in omeprazole content with the passage of time.
>
> In order to enhance the storage stability the cores which contain omeprazole must also contain alkaline reacting constituents. When such an alkaline core is enteric coated with an amount of a conventional enteric coating polymer such as, for example, cellulose acetate phthalate, that permits the dissolution of the coating and the active drug contained in the cores in the proximal part of the small intestine, it also will allow some diffusion of water of gastric juice through the enteric coating into the cores, during the time the dosage form resides in the stomach before it is emptied into the small intestine. The diffused water of gastric juice will dissolve parts of the core in the close proximity of the enteric coating layer and there form an alkaline solution inside the coated dosage form. The alkaline solution will interfere with the enteric coating and eventually dissolve it...
>
> If a conventional formulation of omeprazole is made the stability is not satisfactory, particularly in resistance to humidity, and special moisture-proof packing has been adopted to minimize the troubles. However, this provides no satisfactory solution to the problems in today's drug distribution systems and also leads to increased costs.

Col. 1, line 48 to Col. 2, line 23 of United States Patent No. 4,786,505 (See also Table 3 and Comparative Examples I-V which show that non-subcoated omeprazole pellets

are not stable).

The solution to the stability proposed by the inventors of United States Patent No. 4,786,505 was to insert a water soluble sublayer between the omeprazole core and the enteirc coating. This solution was followed by many other. In fact, after reviewing all the references of record in this application, Applicant is only aware of two prior art references that allege to obtain a stable omeprazole pellets without a sublayer between the omeprazole core and the enteric coating. These two references are the CKD application, discussed above, and WO 96/24338. There are other references such as EP 1010423, but these references are not prior art to the present application. The presently claimed invention are patentable over the CKD application and WO 96/24338 because these references do not disclose or suggest the solution recited in the pending claims, specifically a low amount of arginine and lysine in the core and a high amount of inert processing aid in the enteric coating.

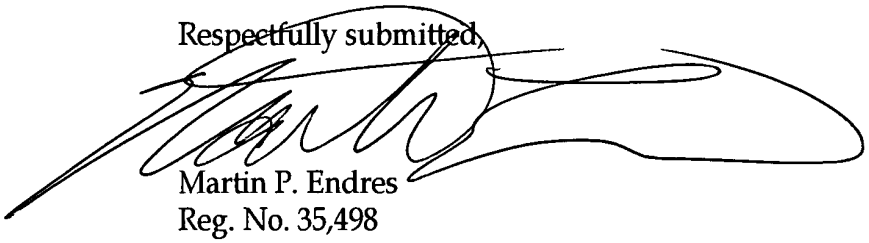
Applicants do not dispute the Examiner's contention on page 7 of the Office Action stating that there is no evidence that the presence of a subcoating is deterimental to the stability of an omeprazole pellet. However this argument is not what Applicants are claiming. What Applicants are claiming is an omeprazole pellet that is as stable as a subcoated pellet but without the need to separately apply a subcoating or sublayer. Applicants have achieved this by a unique combination of a low amount of arginine in the core and a large amount of inert processing aid in the enteric coating. It is this combination that is not dislcosed or suggested in the prior art and that makes the presently claimed invention patentable.

On pages 6 and 8 of the Office Action, the Examiner indicates that the transitional phrase "consisting essentially of" was construed as being equivalent to "comprising" absent a clear indication in the specification of the basic and novel characteristics of the invention. In response to this comment the Applicant respectfully directs the Examiner's attention to pages 1 and 2 of the specification where the prior art attempts to prepare a stable omeprazole pellet are discussed and the new and novel solution to prepare a stable omeprazole pellet as recited in the present claims is discribed. For Example, page 1, lines 29 to 33 states: "The applicants have surprisingly discovered a coating system which avoids the need to use a coating layer to separate the omeprazole core from the enteric coating layer in an omeprazole dosage form."

Nothwithstanding this statement in the specification, the actual language of the claims clearly indicates that there is no coating layer applied to the omeprazole core prior to the application of the enteric coating layer. Specifically each independent claim concludes with the following phrase: "wherein the enteric coating layer is applied directly to the omeprazole containing core without a separating layer between the omeprazole containing core and enteric coating layer." This statement removes any doubt as to the meaning of the claim and the transitional phrases employed in the claims.

Based upon the foregoing amendments and representations, Applicants respectfully submit that the rejection of the claims in the above-identified application have been overcome and should be withdrawn. Early and favorable action is earnestly solicited.

Respectfully submitted,



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